

CLAIMS

What is claimed is:

1. An inventory transport device having a fixed section and a movable section comprising:
 - a RFID reader device mounted on the movable section; and
 - a RFID power device mounted on the fixed section and operable to provide the RFID reader device power without physical contact.
2. The device of claim 1 further comprising a user terminal mounted in the fixed section, the user terminal configured to accept user input to control the RFID reader device and the movable section.
3. The device of claim 2 wherein the user terminal and the RFID reader communicate wirelessly.
4. The device of claim 3 wherein the user terminal and the RFID reader device communicate wirelessly using a wireless local area network protocol.
5. The device of claim 3 wherein the user terminal and the RFID reader device communicate using a short range wireless protocol.
6. The device of claim 1 further comprising one or more RFID antennas mounted on the moveable section.
7. The device of claim 6 wherein at least one of the one or more RFID antennas is mounted on a fork of the moveable section
8. The device of claim 6 wherein the one or more RFID antennas are inside a hermetically sealed container with the RFID transceiver.
9. The device of claim 8 wherein the hermetically sealed box is mounted on a fork of the moveable section.

10. The device of claim 6 wherein the one or more RFID antennas are coupled to an antenna switch configured to select which of the one or more RFID antennas to use.
11. The device of claim 1 wherein the inventory transport device is a forklift.
12. The device of claim 1 wherein the RFID power device provides power via inductive power transfer.
13. The device of claim 12 wherein the RFID power device further comprises an internal power supply.
14. The device of claim 12 wherein the RFID power device is coupled to an external power supply.
15. The device of claim 14 wherein the external power supply is a battery located in the inventory transfer device.
16. A RFID reader for use in an inventory transport device comprising:
 - a RFID transceiver configured to broadcast interrogations and receive replies;
 - and
 - a power source coupled to the RFID transceiver, the power source configured to store energy received from a contactless power source.
17. The RFID reader of claim 16 wherein the inventory device comprises a moveable section and a fixed section, the RFID transceiver mounted on the moveable section.
18. The RFID reader of claim 16 further comprising one or more RFID antennas mounted on the moveable section.
19. The RFID reader of claim 16 wherein at least one of the one or more RFID antennas is mounted on a fork of the moveable section
20. The RFID reader of claim 16 wherein the one or more RFID antennas are inside a hermetically sealed container with the RFID transceiver.

21. The RFID reader of claim 20 wherein the hermetically sealed box is mounted on a fork of the moveable section.
22. The RFID reader of claim 16 wherein the one or more RFID antennas are coupled to an antenna switch configured to select which of the one or more RFID antennas to use.
23. The RFID reader of claim 16 wherein the inventory transport device is a forklift.
24. The RFID reader of claim 16 wherein the RFID power device provides power via inductive power transfer.
25. The RFID reader of claim 24 wherein the RFID power device further comprises an internal power supply.
26. The RFID reader of claim 24 wherein the RFID power device is coupled to an external power supply.
27. The RFID reader of claim 26 wherein the external power supply is a battery located in the inventory transfer device.